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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: LEONHARTSBERGER ET AL.-2 PCT  
SERIAL NO.: 10/530,843 GROUP:  
FILED: APRIL 8, 2005  
TITLE: FEEDBACK-RESISTANT HOMOSERINE TRANSUCCINYLAASES

SUBMISSION OF INFORMATION DISCLOSURE  
STATEMENT OF DR. HOLGER POTTEN

MAIL STOP NON-FEE AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants wish to bring to the attention of the Patent Examiner the attached Information Disclosure Statement, duly signed by Dr. Holger Potten, and the references listed on the enclosed Form PTO-1449 and attached thereto. It is respectfully requested that the foregoing Information Disclosure Statement be incorporated into the official file of the present patent application.

Respectfully submitted,  
LEONHARTSBERGER ET AL.-2 PCT

*Handwritten signature of Allison C. Collard*

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Attorneys for Applicant

Encs: Information Disclosure Statement of Dr. Holger Potten, International Search Report, PTO-1449 form and sixteen (16) references

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on May 5, 2005.

*Handwritten signature of Melissa Konko*  
Melissa Konko

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
LEONHARTSBERGER ET AL. :  
Serial Number 101530,843 : Group Art Unit:  
Filed: APR 18, 2005 :  
For: :  
FEEDBACK-RESISTANT HOMOSERINE TRANSSUCCINYLASES

Information Disclosure Statement

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir or Madam:

I, Holger Potten, associated with the preparation and prosecution of the above-identified application, residing at Neubiberger Straße 17a, 81737 München, Germany, wish to call the attention of the Patent Examiner to the references enumerated on the enclosed PTO Form-1449.

I believe the documents enumerated on the enclosed Form PTO-1449 and attached thereto, are cited in the enclosed International Search Report and may be material to the examination of the application.

Therefore, it is respectfully requested that the foregoing Information Disclosure Statement be considered by the Examiner and incorporated into the file of this application.

I wish to comment as follows concerning the prior art references enumerated on PTO Form-1449:

US 5,120,837, cited in the application, is already in English language.

US 5,698,418, cited in the International Search Report, is already in English language.

US 2002/0106800 A1, cited in the International Search Report, is already in English language.

EP 0 745 671 A2, cited in the application, is already in English language.

JP 2000-139471-A, cited in the application, the English Thomson Derwent translation is enclosed.

MORINAGA ET AL.: "Regulatory Properties of L-Methionine Biosynthesis in Obligate Methylophile OM 33: Role of Homoserine-0-transsuccinylase", Agric. Biol. Chem., Vol. 46, No. 1, 1982, Pages 57 – 64, cited in the International Search Report, is already in English language.

BOURHY ET AL.: "Homoserine O-Acetyltransferase, Involved in the *Leptospira meyeri* Methionine Biosynthetic Pathway, Is Not Feedback Inhibited", Journal of Bacteriology, July 1997, Vol. 179, No. 13, Pages 4396 – 4398, cited in the International Search Report, is already in English language.

DUCLOS ET AL.: "Nucleotide sequence of the *metA* gene encoding homoserine *trans*-succinylase in *Escherichia coli*", Nucleic Acids Research, 1989, Vol. 17, No. 7, Page 2856, cited in the International Search Report, is already in English language.

LAWRENCE ET AL.: "Regulation of Methionine Synthesis in *Salmonella Typhimurium*: Mutants Resistant to Inhibition by Analogues of Methionine", Genetics, April 1968, Vol. 58, Pages 473 – 492, cited in the application, is already in English language.

KREDICH ET AL., TOMKINS ET AL.: "The Enzymic Synthesis of L-Cysteine in *Escherichia coli* and *Salmonella typhimurium*", The Journal of Biological Chemistry, 1966, Vol. 241, No. 21, Pages 4955 – 4965, cited in the application, is already in English language.

LEE ET AL.: "Multimetabolite Control of a Biosynthetic Pathway by Sequential Metabolites", The Journal Of Biological Chemistry, 1966, Vol. 241, No. 22, Pages 5479 – 5480, cited in the application, is already in English language.

SHIOZAKI ET AL.: "S-Adenosyl-L-methionine Production by *Saccharomyces sake*: Optimization of the Culture Conditions for the Production of Cells with a High S-Adenosyl-L-methionine Content", Agric. Biol. Chem., 1989, Vol. 53, No. 12, Pages 3269 – 3274, cited in the application, is already in English language.

SCHLENK ET AL., DePALMA ET AL.: "The Preparation of S-Adenosylmethionine", J. Biol. Chem., 1957, Pages 1037 – 1050, cited in the application, is already in English language.

GREENE ET AL.: "Biosynthesis of Methionine" in Neidhardt F.C., *Escherichia coli* and *Salmonella typhimurium*, Cellular and molecular biology, 2<sup>nd</sup> Edition, ASM Press, Washington DC 1996, Pages 542 – 560, cited in the application, is already in English language.

HORNUNG ET AL.: "Conversion of cucumber linoleate 13-lipoxygenase to a 9-lipoxygenating species by site-directed mutagenesis", Proc. Natl. Acad. Sci., USA, March 1999, Vol. 96, Pages 4192 – 4197, cited in the German office action, is already in English language.

BORN ET AL.: "Enzyme-catalyzed acylation of homoserine: mechanistic characterization of the *Escherichia coli* *metA*-encoded homoserine *trans*succinylase", Biochemistry 1999, Vol. 38, No. 43, Pages 14416 – 14423, cited in the German office action, an English abstract is enclosed.

Signed this *M<sup>th</sup>* day of April, 2005.



.....  
Dr. Holger Potten

FORM PTO-1449 (REV. 7-80)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. <b>LEONHARTSBERGER ET AL. (3,137)</b>	SERIAL NO. <b>10/530,843</b>
LIST OF REFERENCES CITED BY APPLICANT  (Use several sheets if necessary)		APPLICANT: <b>LEONHARTSBERGER ET AL.</b>	
		FILING DATE: <b>APRIL 8, 2005</b>	GROUP:

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,120,837	06/09/92 Folhertingham et al.			
	AB	2002/0106800	08/08/02 Liaw et al.			
	AC	5,698,418	12/16/97 Brunner et al.			
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO
AL	0745671 A2	12/04/96 Europe				
AM	2000-139471-A	05/23/00 Japan				
AN						
AO						
AP						

**OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)**

	AR	Thomson Delwent corresponding to JP2000-139471-A.
	AS	Horinaga et al., Agric. Biol. Chem., Vol. 46, No. 1, 1982, Pages 57-64.
	AT	Bourhy et al., Journal of Bacteriology, Vol. 179, No. 13, July 1997, Pages 4396-4398.

EXAMINER	DATE CONSIDERED
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.: LEONHARTSBERGER ET AL.: 2 (PST)

SERIAL NO.

10/530,843

APPLICANT:

LEONHARTSBERGER ET AL.

## LIST OF REFERENCES CITED BY APPLICANT

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## FOREIGN PATENT DOCUMENTS

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							YES	NO
	AL							
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## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR		<u>Duclos et al., "Nucleotide sequence of the metA gene encoding homoserine trans-succinylase in Escherichia coli," Nucleic Acids Research, Vol. 17, No. 7, Page 2856</u>
	AS		<u>Lawrence et al., Smith et al., Genetics, Vol. 58, April 1968, Pages 473-492.</u>
	AT		<u>Kredich et al., Tomkins et al., "The Enzymic Synthesis of L-Cysteine in Escherichia coli and salmonella typhimurium," J. Biol. Chem., Vol. 241, No. 21, Pages 4955-4965</u>
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U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.: **LEONHARTSBERGER ET AL. 7/10** SERIAL NO **10/530,843**

APPLICANT: **LEONHARTSBERGER ET AL.**

FILING DATE: **April 8, 2005** GROUP:

LIST OF REFERENCES CITED BY APPLICANT

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	AS		Shiozaki et al., Agric. Biol. Chem., Vol. 53, No. 12, 1989, Pages 3269-3274.					
	AT		Shlenker et al., DePalma et al., "The Formation of S-Adenosylmethionine in Yeast," J. Biol. Chem., 1957, Pages 1037-1050.					

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FORM PTO-1449  
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PATENT AND TRADEMARK OFFICE

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10/530,843

APPLICANT: LEONHARTSBERGER ET AL.

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	AR		<u>Greene et al., "Biosynthesis of Methionine", ASM Press, Washington 1996,</u>					
			<u>Weidhardt, Escherichia coli and Salmonella typhimurium, 2nd Ed, Pages 542-560.</u>					
	AS		<u>Homlung et al, Walther et al., Kuhn et al., PROC. NATL. ACAD. SCI., Vol. 96, 1999,</u>					
			<u>Pages 4192-4197.</u>					
	AT		<u>Born et al, Blanchard et al., Biochemistry, Vol. 38, NO. 43, Pages 14416-</u>					
			<u>14423 as abstract.</u>					

EXAMINER

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.